REMARKS

Claims 1-20 are pending in the application. Applicant notes with appreciation the Examiner's withdrawal of his rejection of the claims under 35 U.S.C. § 103 over Blake et al., in view of Canguilhem, and further in view of Hamel, and yet further in view of Turnbull.

Subsequent to the *fourth non-final* office action, claims 1-18 *now* stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Blake et al., in view of Canguilhem, *further* in view of Copeland¹, and yet *further* in view of Hamel. Claims 19-20 stand rejected under 35 U.S.C. § 103(a) over Blake et al., in view of Canguilhem, *further* in view of Hamel, yet *further* in view of Copeland, and even *further* in view of Turnbull. These rejections are respectfully traversed in view of the arguments below.

A. THE SECTION 103 REJECTIONS

As noted above, Applicant assumes for purposes of this Reply that the Examiner intended to include the Copeland reference in the rejection of claims 1-18 at page 5. Copeland is included in the rejection of claims 19-20. In the four-reference obviousness rejection of claims 1-18, the Examiner argues that it would have been obvious to take the disclosure of Blake et. al, modify it with the teachings of Canguilhem to obtain part of certain isolated elements of claim 1, take the modified result and modify it again using the teachings of Copeland to obtain something having the remainder of those certain

¹ The Examiner's actual rejection of claims 1-18 at page 5 does not include Copeland. However, Applicant guesses that the Examiner intended to include Copeland in the rejection since it is discussed in two sentences on page 7 of the Office Action. Applicant further guesses that the "Copeland" reference that the Examiner intended to include in the rejection was the article entitled "Valuation: Measuring and Managing the Value of Companies," by Copeland, Koller and Murrin, 1990.

elements, and finally take that twice-modified result and modify it again with the teachings of Hamel to obtain something that includes all of the words of claim 1.

In the five-reference obviousness rejection of claims 19-20 the Examiner argues that it would have been obvious to take the disclosure of Blake et. al, modify it with the teachings of Canguilem to obtain part of certain isolated elements of claim 1, take the modified result and modify it again using the teachings of Copeland to obtain something having the remainder of those certain elements, take that twice-modified result and modify it again with the teachings of Hamel to obtain something that includes all of the words of claim 1, and finally take the thrice-modified result and modify it with the teachings of Turnbull to obtain something that includes all of the words of claims 19 and 20.

Even if the five references each taught what the Examiner asserts -- and Applicant shows below that they do <u>not</u> -- citing references which merely indicate that isolated elements and/or features recited in the claims are known is not a sufficient basis for concluding that the combination of claimed elements would have been obvious. <u>Ex parte Hiyamizu</u>, 10 USPQ2d 1393 (BPAI 1988). This is particularly so in the absence of motivation to combine, as is the case here.

a. THE NEWLY CITED REFERENCE DOES NOT TEACH THE CLAIMED FIRST AND SECOND INDEPENDENT VARIABLES RELATED TO THE VALUE OF THE INTANGIBLE ASSET

The Examiner admits that Blake et al. and Canguilhem do not teach a method including a first independent variable and a second independent variable related to a specific intangible asset of interest. While the Examiner asserts that the same is taught by Copeland, Applicant respectfully disagrees.

Exhibits 3.4, 3.6, and 3.7 in Chapter 3 of Copeland are plots of tangible variables, not intangible variables. These are known financial numbers of a company and are plotted to

show the relation of price to earnings ratio against earnings per share growth in Exhibit 3.4, market to book value against DCF rate of return to book value in Exhibit 3.6, and change in share value versus a change in accounting practice in Exhibit 3.7. These are not relevant to the invention of claims 1-18 since:

- a) the variables are tangible not intangible;
- b) the variables used for the axes of the plots are not independent of one another since they include common factors (e.g. book value on both axes in Exhibit 3.6); and
- c) they do not teach or suggest establishing first and second variables related to an intangible asset and establishing performance criteria which are probative of the value of the independent variables, in which the performance criteria are external to (i.e not part of) the independent variables.

It is well-established that, in order to show obviousness, all limitations in the claim must be taught or suggested by the prior art. In Re Boyka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974); MPEP § 2143.03. It is error to ignore specific limitations distinguishing over the references. In Re Boe, 184 U.S.P.Q. 38, 505 F.2d 1297 (C.C.P.A. 1974); In Re Saether, 181 U.S.P.Q. 36, 492 F.2d 849 (C.C.P.A. 1974); In Re Glass, 176 U.S.P.Q. 489, 472 F.2d 1388 (C.C.P.A. 1973). Copeland fails to teach or suggest the claimed method of establishing a first independent variable and a second independent variable related to the value of the specific intangible asset of interest. The grids of the prior art are simply plots of two variables against one another, not a process for evaluating an intangible asset using criteria probative of the value of an asset.

b. <u>NEITHER BLAKE ET AL., COPELAND NOR CANGUILHEM</u> TEACH OR SUGGEST THE CLAIMED SCORING, SUMMING AND PLOTTING STEPS

Applicant's claimed invention is a *quantitative* system which uses actual metrics for analyzing a specific asset by collecting and summing score data and calculating and plotting a position on a chart in accordance with the scores. Independent claim 1 of the present application recites, *inter alia*, the steps of:

scoring each of said performance criteria statements to produce a plurality of scores which reflect the applicability of said performance criteria statements to said specific intangible asset of interest;

storing said plurality of scores obtained by said scoring step in an electronic database;

using a computing apparatus to read and sum said stored plurality of scores to generate first and second total scores based upon the extent to which individual statements accurately describe said intangible asset of interest;

using a printer to transform_physical media into a chart by physically plotting on said media a first axis relating to said first variable and a second axis relating to said second variable;

using said printer to physically plot a point on said chart, said point being located at coordinates corresponding to said first and second total scores, respectively;

The Examiner asserts that Blake et al. disclose two variables, criteria statements, first and second scores, a chart with two axes each relating to one of the variables, and plotting a point on the chart corresponding to the first and second total scores. Applicant respectfully disagrees for the reasons set forth below.

Blake et al. merely disclose a chart which is intended to express the differences between several managerial styles. Blake et al. fail to teach or suggest the recited step of scoring performance criteria statements, fail to teach or suggest the recited step of summing a plurality of scores obtained by that scoring step, and fail to teach or suggest physically plotting a point on a chart at a location corresponding to first and second total scores.

The numbers used on the two axes are not scores at all, and are certainly not sums of performance criteria statement scores. The 9,9, 9,1, 1,9, 5,5, and 1,1 values on Figure 1 of Blake et al. are used only to identify portions of the grid. These values are not used for calculating chart positions; Blake et al. could equally well have used words alone to define the five management styles.

The significance of the numbering scheme shown on Figure 1 of Blake et al. can be seen clearly from Chapter 3 thereof, a copy of which was attached to Applicant's response filed October 2, 2001. For example, in Chapter 3, Blake et al. describe the characteristics of the 9,1 Management Style in words, describing how the following issues are handled in this management approach: the concept of goals, boss-subordinate relationships, creating and maintaining morale, communication activities, approaches to managing conflict, impact on creativity and change, commitment, management development, personal behavior. There is no teaching or suggestion of performing any calculations in this respect; there are only descriptions of the behavior related to "9,1 Management." Chapters 4, 5, 6 and 7 repeat the above analysis for each of the other four grid positions. There is likewise no disclosure in those chapters of calculations to generate particular chart positions.

The numbers associated with the axes in the cited portion of Blake et al. are merely used as labels for each management style; the actual values of these numbers are superfluous to Blake's disclosure, which relates to the distinctions between different management styles. The inclusion of these axis labels does not teach or suggest the presently claimed quantitative process for producing a chart, which includes the steps of scoring performance criteria statements, summing scores, and physically plotting a point on the chart corresponding to first and second scores.

The Examiner recognizes that Blake et al. do not teach the use of the chart produced in accordance with the steps discussed above in making at least one decision regarding the value of an intangible asset of interest. While the Examiner argues that this would have been obvious to one skilled in the art in view of Canguilhem and Copeland, Applicant respectfully disagrees. As set forth above, Blake et al. disclose a chart for aiding in the

understanding of different managerial styles, and do not teach or suggest the claimed steps for calculating a numerical value for a particular intangible asset of interest in order to analyze that intangible asset. Thus, it is respectfully submitted that Blake et al., even when combined with Canguilhem and Copeland, would not suggest the claimed step of using the chart produced in accordance with the steps discussed above in making at least one decision regarding the value of an intangible asset of interest.

Blake et al., Copeland and Canguilhem fail to teach or suggest at least the claimed steps of scoring performance criteria statements, summing scores, physically plotting a point on a chart corresponding to first and second scores, and using the chart thus produced in making at least one decision regarding the value of an intangible asset of interest.

c. NEITHER HAMEL, BLAKE ET AL., COPELAND NOR

CANGUILHEM TEACH OR SUGGEST INDEPENDENT

VARIABLES OR THE CLAIMED SCORING STEP, AND THE

CLAIMED INVENTION IS NONOBVIOUS THEREOVER.

Independent claim 1 of the present application recites, inter alia, the following:

...establishing a first independent variable and a second independent variable related to the value of said specific intangible asset of interest...

...scoring each of said performance criteria statements to produce a plurality of scores which reflect the applicability of said performance criteria statements to said specific intangible asset of interest;

As is recognized by the Examiner, neither Blake et al. nor Canguilhem teach or suggest establishing a first independent variable and a second independent variable related to a specific intangible asset of interest. With respect to Blake et al., and with respect to the Examiner's use of Blake et al. in the pending § 103 rejections, Applicant specifically incorporates herein each of the arguments set forth in Applicant's Responses

filed February 3, 2004 and October 2, 2001. With respect to Canguilhem, Applicant refers the Examiner to the discussion thereof in the Affidavits of Drs. Bowman and Morand filed February 3, 2004.

With respect to the cited Hamel reference, Figs. 7.2, 7.3, and Chapter 7, teach a non-quantitative method wherein evaluators create and label grid positions based on conjectural "low" and "high" values. In Chapter 8, Hamel makes use of a five-point qualitative scale to better represent the space between low and high values and to help a company to assess where its skill sets can be used to advantage.

The claimed invention, unlike Hamel (and unlike Blake et al., Copeland and Canguilhem), determines the value of an intangible by, *inter alia*, scoring each of a plurality of performance criteria statements that are probative of independent variables to produce a plurality of scores which reflect the applicability of the performance criteria statements to the intangible, and then summing the scores to generate first and second total scores. Grid positions are not created and labeled based simply upon conjectural high and low values, but rather the positions reflect a sum of performance criteria scores which are distinct from (or "external to") the independent variables. Neither Hamel nor Blake et al. nor Canguilhem teach or suggest establishing a first independent variable and a second independent variable related to the value of said specific intangible asset of interest, or scoring each of a plurality of performance criteria statements to produce a plurality of scores which reflect the applicability of said performance criteria statements to the specific intangible asset of interest.

Applicant incorporates herein by reference the Affidavit of Dr. John C. Bowman filed February 3, 2004. Dr. Bowman further explains the disclosure of the Hamel ("Hamel and Hean") and Canguilhem references and testifies that (1) neither Canguilhem alone nor in combination with Blake and Hamel would enable a person of ordinary skill in the art to practice the presently claimed invention, and (2) neither Canguilhem alone nor in combination with Blake and Hamel would render the presently claimed invention obvious to a person of ordinary skill in the art.

Applicant further incorporates herein by reference the Affidavit of Dr. Peter Morand filed Applicant further incorporates herein by reference the Affidavit filed February 3, 2004. Dr. Morand testifies that (1) the combination of the teachings of Canguilhem, Blake, and Hamel would not enable one of ordinary skill in the art to practice the presently claimed invention, and (2) the combination of the teachings of Canguilhem, Blake and Hamel would not render the presently claimed invention obvious to one of ordinary skill in the art.

Applicant further incorporates herein by reference the Affidavit of J. Ronald McCullough filed February 3, 2004. Dr. McCullough testifies that (1) the claimed invention has been commercially successful, and (2) the claimed invention has received extensive acclaim in the industry.

It is respectfully submitted that the three Affidavits discussed above show secondary considerations of non-obviousness which are fully effective to overcome any showing of obviousness asserted by the Examiner with respect to the Blake, Canguilhem and Hamel references. See 37 C.F.R. § 1.132, MPEP § 716.

In view of all of the above, it is submitted that the rejection of claims 1-18 under 35 U.S.C. § 103(a) over Blake in view of Canguilhem, further in view of Hamel, and further in view of Copeland, is improper and must be withdrawn.

d. TURNBULL FAILS TO TEACH OR SUGGEST CLAIMS 19-20

Dependent claims 19 and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over The Managerial Grid in view of Canguilhem, further in view of Hamel, further in view of Copeland, and yet further in view of Turnbull. All of the arguments set forth above and in Applicant's Responses filed February 3, 2004 and June 30, 2003 with respect to independent claim 1 are fully applicable to dependent claims 19 and 20, and are incorporated herein. The disclosure of Turnbull, like that of Blake et al., is qualitative in nature. Applicant agrees with the Examiner's assertion that Turnbull suggests assessment by graphic representation of current and future positions of a

company. Applicant further agrees with the Examiner that the last two paragraphs of page 12 of Turnbull disclose generating future business portfolios based on project trends of certain factors in order to identify major strategic issues facing the company. However, Applicant sees no teaching or suggestion in Turnbull of the recited steps of calculating the future value by:

iterating said scoring, summing, transforming, and plotting steps using new rating levels, determined through a code in the format x, y, z where x is a number of improvement steps which the asset is likely to achieve if its current position is at a lowest performance level, y is a number of improvement steps that the asset is likely to achieve if its current position is at a next highest performance level, and z is a number of improvement steps the asset is likely to achieve if its current position is at a next highest performance level.

Turnbull clearly fails to teach or suggest the above-recited calculating steps, particularly in the cited pages 7 and 12. In order to show obviousness, all limitations in the claim must be taught or suggested by the prior art. In re Boyka, supra. Turnbull describes a number of portfolio planning models that are used to describe the position of companies with respect to their business strengths and weakness, in particular those that are relevant to their competition. These models use graphic presentations to illustrate different current and future positions. The positions are established by arbitrary judgements and are not calculated. The BCG approach described by Turnbull on page 12, cited by the Examiner, uses a 10% growth rate to separate regions on the grid and then uses terms like Cash Cows to describe specific companies. One could equally have used the words

"high" and "low" to separate these regions. This point is well illustrated on page 16 of Turnbull, where it is noted that:

The portfolio analysis is done by positioning each SBA in a scatter diagram along two dimensions; profitability and life cycle position. Profitability is on a five-point scale; outstanding, high, average, low and loss. Life cycle on the horizontal axis is classified into four positions; emergence, growth, maturity and decline.

Turnbull's use of the word "classified" clearly indicates that the positions are judgments and not arrived by calculation. This is true for both the current positions and the desired future positions. Applicant's claimed quantitative steps, reproduced above, are not suggested.

Dependent claims 19 and 20 are, therefore, allowable over the cited art and the rejection under 35 U.S.C. § 103(a) over Blake in view of Canguilhem, further in view of Hamel, still further in view of Copeland, and yet further in view of Turnbull must be withdrawn.

B. THE PREVIOUSLY FILED AFFIDAVITS

Applicant respectfully disagrees with the Examiner's comments concerning the Affidavits Under 37 C.F.R. 1.132 filed February 3, 2004. In particular, no valid legal or procedural basis has been cited for dismissing the affidavits of the three esteemed Affiants. While the Examiner has deemed the Affidavit of Dr. John C. Bowman ineffective because "Dr. Bowman is the inventor's brother," the Affiant is also a

² Dr. Bowman is actually the inventor's son

Professor of Mathematical and Statistical Sciences who holds Masters and Ph.D. degrees from Princeton University. See Affidavit of Dr. John C. Bowman at page 1. Moreover, as Dr. Bowman testified, he has no personal involvement in development of the particular technology that is the subject of the present application. The Examiner's assertion that Dr. Bowman is biased is unfounded.

With respect to the second Affiant, Dr. Morand, the Examiner points out that Dr. Morand uses the word "opinion" to describe his conclusions regarding nonobviousness, and therefore dismisses the Affidavit. It is respectfully submitted, however, that nonobviousness, by its very nature, involves issues of opinion.

Applicant incorporates by reference herein the Affidavits of Drs. Morand and Bowman Under § 1.132 affidavits filed February 3, 2004, particularly these esteemed Affiants' comments concerning the claimed invention and the Blake et al., Canguilhem, Hamel and Turnbull references.

With respect to the Affidavit of Ronald McCullough, the Examiner notes that "Mr. McDonough (sic, McCullough) is an officer within Pro-Grid Ventures which is an assignee of the current invention." Applicant respectfully points out that Mr. McCullough's Affidavit addresses commercial success and acclaim by the industry with respect to the invention, and Mr. McCullough is believed to be the person most knowledgeable regarding these two matters. With respect to the Examiner's asserted

absence of evidence in Mr. McCullough's Affidavit, the Examiner's attention is directed to Exhibit A thereto. It is submitted that the two secondary considerations of commercial success and acclaim by the industry have been established in Mr. McCullough's Affidavit.

Applicant reasserts and incorporates by reference the entire Affidavit of Ronald McCullough filed February 3, 2004 showing secondary considerations of nonobviousness.

C. THE § 112 REJECTION

Claims 1-20 stand rejected under 35 U.S.C. 112, First Paragraph, as not being enabled.

Applicant strongly but respectfully disagrees, and this rejection is traversed.

With respect to the claim language "establishing a first independent variable and a second independent variable related to the value of said specific intangible asset of interest," Applicant respectfully refers the Examiner to Applicant's disclosure at page 6, lines 18-24; page 7, lines 1-24; page 10, lines 7-14; page 11, lines 14-19; page 11, line 1 through page 13, line 8; Figures 1a through 1d (particularly 1d), 3, 4a, 4b, 4c, 5, 6, and 8; and claims 1-20 as originally filed. The examples include, e.g., a technical asset with the two independent variables of commercial strength and technical strength. These are independent because each can be achieved independent of the other. Likewise the

disclosure includes examples wherein a university can have the two independent objectives of teaching excellence or research excellence; the university does not have to excel at both (in fact some universities do not do both). The specification discloses establishing independent variables which the practitioner deems are the prime determinants of the value of the intangible asset. These are neither a product of the invention nor an intermediate variable, but are specified initial conditions.

Furthermore, with respect to the phrase "independent variables," it is respectfully submitted that a person of ordinary skill in the art at the time the invention was made would easily have understood the meaning of this term in the context of the claim language "establishing a first independent variable and a second independent variable related to the value of said specific intangible asset of interest."

With respect to the claim language "establishing a series of performance criteria statements probative of the value of said first and second independent variables," the Examiner's attention is respectfully directed to Applicant's disclosure at page 7, lines 15-24, page 8 line 1 to page 9, line 16; page 10, line 16 to page 11, line 12; page 14, lines 15-20; page 16, line 11 through page 17, line 6; Figures 2, 3, 5, 6, 7, 9, 11 and 12; and claims 1-20 as originally filed.

While the answers to the Examiner's specific questions at page 4 of the office action are readily ascertainable by one skilled in the art with reference to the specification pages recited above, Applicant will now provide a plain English example that answers these

questions with reference to the figures. No new matter is being suggested, but rather Applicant synthesizes the various portions of the disclosure in order provide an example which succinctly answer to the Examiner's particular questions:

- 1. The user of the invention has an intangible asset for which he needs to determine its value, for example a process for treating mineral ores to improve their separation (see Figure 9 in the Application).
- 2. The user establishes two independent variables that he deems represent the value of this new process, for example, the commercial assessment and the technical assessment (see Figure 10). The process might represent a major technical advance but the cost of the process could be too high to be commercially attractive. Or, conversely, the technical advance might be small and easily duplicated by competitors but the yield of the process might be so outstanding that it would have high commercial value. The user may decide that he wants both independent objectives to be achieved, to ensure that that there will be no competitors and also that the profit margins will be high.
- 3. The next step is to establish performance criteria probative of the two independent objectives. The user develops a list of criteria that are appropriate, for example, patents, trademarks, technological improvements etc, as shown in Table 2. These are surrogates for tangible measures, which do not exist for intangible assets.

It is respectfully submitted that, in view of the comments above, the rejection under 35 U.S.C. § 112, First Paragraph, has been overcome and should be withdrawn.

D. CONCLUSION

Having responded to all objections and rejections set forth in the outstanding Office Action, it is submitted that claims 1 thru 20 are in condition for allowance and Notice to that effect is respectfully solicited. In the event that the Examiner is of the opinion that a brief telephone or personal interview will facilitate allowance of one or more of the above claims, he is courteously requested to contact applicant's undersigned representative.

Respectfully submitted,

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